

REMARKS

Claim 1 is pending in the present application. No new matter was added. The objections and rejections set forth in the Office Action are respectfully traversed below.

The Drawings:

Figures 1 and 2 were objected to for failing to have a unique figure number. Applicants have submitted herewith a Request for Approval of Drawing Changes noting the corrections thereon. Accordingly, withdrawal of this objection is respectfully requested.

The Specification:

Typographical errors were corrected in the specification to correctly refer to Fig. 7 as the prior art drawing (not Fig. 4).

Rejections Under 35 U.S.C. § §103:

Claim 1 was rejected under 35 U.S.C. § §103 over **Ramberg** (U.S. Patent No. 5,433,454) in view of **Nakazawa et al.** (U.S. Patent No. 5,967,489). It is submitted that the prior art does not teach or suggest all the features recited in the present claimed invention.

For instance, the prior art does not teach or suggest the present claimed feature for the diameter of the opening passageway (hereinafter referred to as "Do"), the diameter of the main passageway (hereinafter referred to as "Dm") and the inside diameter of the gasket (hereinafter

referred to as "Dg") having the relation of $D_m < D_g < D_o$. The problem to be solved in the present invention is to enlarge D_m , which is the smallest diameter, as much as possible.

In contrast, **Ramberg** appears to disclose the relation of $D_g < D_m = D_o$, and does not address the problem addressed by the present invention, in the manner claimed. **Nakazawa et al.** appears to disclose the relation of $D_m < D_o$, but there is no description regarding D_g and the inside diameter of the gasket holding annular ridge at all. Therefore, even if the two references are combined, the present invention cannot be obtained.

In addition, the passageway 42 of **Nakazawa et al.** is not a "slanting main passageway." Further, the passageway 41 of **Nakazawa et al.** has a problem in that the channel diameter is small, which is the same problem as in the comparative example shown in Fig. 2 of the present application. Therefore, **Nakazawa et al.** does not teach or suggest all the claimed features.

For at least these reasons, the present claimed patentably distinguishes over the prior art. Accordingly, claim 1 is in condition for allowance, which action, at any early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the by the current amendment. The attached page is captioned "Version with markings to show changes made."

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully Submitted,

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PATENT TRADEMARK OFFICE

Enclosures: Version with markings to show changes made
Request for Approval of Drawing Corrections w/Figs marked in red ink

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VERSION WITH MARKINGS TO SHOW CHANGES MADE 09/437,296

The paragraph beginning on page 1, line 16 has been replaced , with the following rewritten paragraph:

For use in semiconductor manufacturing equipment or the like, we have proposed a fluid control apparatus 4 which comprises a massflow controller 3 and shutoff-opening devices 1, 2 provided respectively at the left side and right side of the massflow controller 3 as shown in FIG. [4] 7. Each of the shutoff-opening devices 1, 2 comprises a plurality of valves 6, 7 (8, 9, 10) each having an inlet and an outlet in a lower surface thereof, and a valve mount 28 (29) having the valves 6, 7 (8, 9, 10) removably installed thereon from above as arranged in a direction. The valve mount 28 (29) comprises an inflow channel forming member 30 (34) having a channel in communication with the inlet of the valve 6 (8) disposed at one end thereof, one or a plurality of communication channel forming members 31 (36, 38) having a channel for causing the outlet of one of the valves 6 (8, 9) to communicate with the inlet of the valve 7 (9, 10) adjacent thereto, and an outflow channel forming member 33 (39) having a channel in communication with the outlet of the valve 7 (10) disposed at the other end of the mount (see Japanese Patent Application No. 278473/1997).

The paragraph beginning on page 6, line 10 has been replaced , with the following rewritten paragraph:

-- FIG. 7 is a diagram showing a fluid control apparatus [in] for which the fluid coupling of the invention is used. --

IN THE CLAIMS:

Claim 1 has been AMENDED to read as follows:

1. (Amended) A fluid coupling comprising first and second coupling members having respective gasket holding annular ridges on butting end faces thereof, and an annular gasket interposed between two coupling members, the fluid coupling being characterized in that [at least one of the] each coupling member[s] has a fluid channel comprising an opening passageway orthogonal to the butting end face thereof, and a slanting main passageway communicating therewith, and having a diameter smaller than the diameter of the opening passageway, the diameter of the opening passageway being equal to the inside diameter of the annular ridge, the gasket having an inside diameter smaller than the diameter of the opening passageway.